

Aastra 53i How To

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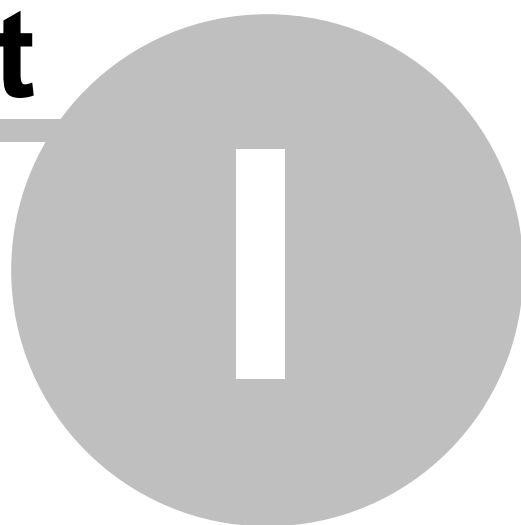
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Foreword

...

Part



1 Introduction

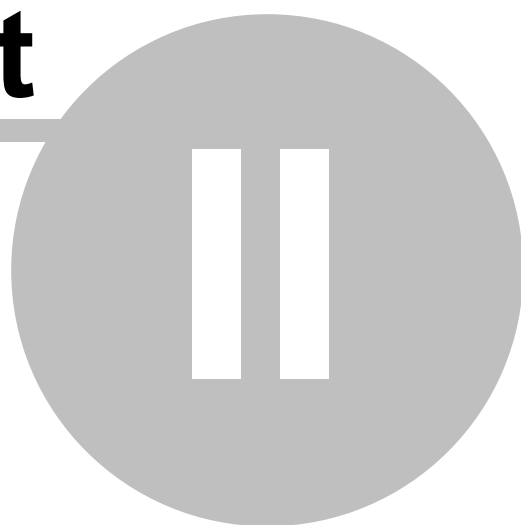
Aastra 53i

How to use Aastra 53i with PBXware



This "How to" is written as general guide on how to use Aastra 53i with PBXware using SIP Version 2.2 Aastra 53i firmware. It covers the most common tasks that are required to have your Aastra 53i working efficiently.

Part



2 Registering Aastra 53i

- [Requirements](#)
- [Manual Configuration](#)
- [Auto Provisioning](#)
- [Auto Configuration](#)

2.1 Requirements

1. Aastra 53i firmware.

- Make sure that the device is loaded with **SIP Version 2.2** firmware.

2. DHCP server.

- Fully configured and operational [DHCP](#) server.

2.2 Manual Configuration

- [UAD Settings](#)
- [Creating Extension](#)
- [Registering Phone](#)

2.2.1 UAD Settings

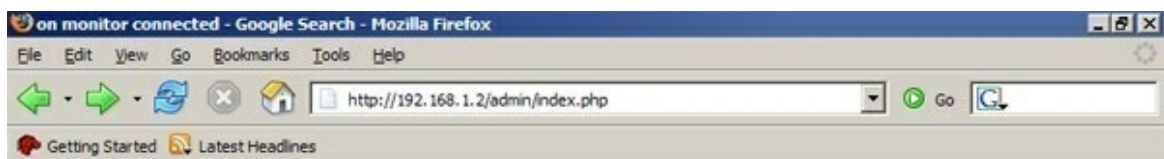
STEP ONE: PBXware [IP address](#).

1. Find out the IP address of PBXware server.

STEP TWO: Login into PBXware.

1. Open a new browser window and enter the IP address followed by "/admin/index.php" in order to access the PBXware administration interface login screen.

Example: <http://192.168.1.2/admin/index.php>



an example with IP address followed by "/admin/index.php"

2. Hit "Enter" on your keyboard.
3. Login into PBXware with your e-mail address and password.



STEP THREE: [UAD](#) status.

1. Make sure the UAD is enabled. To check the UAD status, navigate to "Settings:UAD", and click on the "edit" icon corresponding to "Aastra 53i".

[Add User Agent](#)**SIP****User Agent**

Aastra 480i		
Aastra 9112i		
Aastra 9133i		
Cisco 7960		
Grandstream BT-101		
Grandstream BT-102		
Grandstream GXP-2000		
Grandstream HT-286		
Grandstream HT-386		
Grandstream HT-486		
Grandstream HT-488		
Grandstream HT-496		
Polycom IP 301		
Polycom IP 501		
Polycom IP 601		
Snom 320		
Aastra 53i		
Sipura SPA-941		
Sipura SPA 2000		
Sipura SPA 2002		
Sipura SPA 2100		
Sipura SPA 3000		
X-Lite		
X-Pro		
FireFly		

Aastra 53i | EDIT BUTTON

2. Make sure "Status" is set to "active", "Auto provisioning" is set to "No", and "[DHCP](#)" is set to "Yes".

» Device > Aastra 53i

Protocol: sip

General

DTMF Mode: rfc2833

Status: active

Network Related

NAT: ☐ Yes ☐ No ☐ Never
☐ Route ☒ N/A

Channels

Incoming Limit: 1

Outgoing Limit: 1

Codecs

Disallow: all

Allow: ☒ G.711 ulaw ☒ G.711 alaw
☐ G.723.1 ☐ G.726
☐ G.729 ☐ GSM
☐ iLBC ☐ Speex
☐ LPC10 ☐ H.261 Video
☐ H.263 Video ☐ H.263+ Video

Auto Provisioning

Auto provisioning: ☐ Yes ☒ No ☐ N/A

DHCP: ☒ Yes ☐ No ☐ N/A

Save Go back

User Agent Auto Provisioning Template:

3. Click on "Save" to save changes.

2.2.2 Creating Extension

STEP ONE: Add Extension.

1. Navigate to "Extensions". Click on "Add Extension".

PBXware Site Settings SM Settings Help Logout

Select a server: 192.168.1.2

Extensions Trunks DIDs Conferences

Add Extension Search

Name	Extension	User Agent	Status	Protocol
« left				

Page 1 of 2 next »

2. The standard options window will be shown below.

» Extensions: Add

Advanced Options

UAD: Please select..

Location: Please select..

Go back Next »

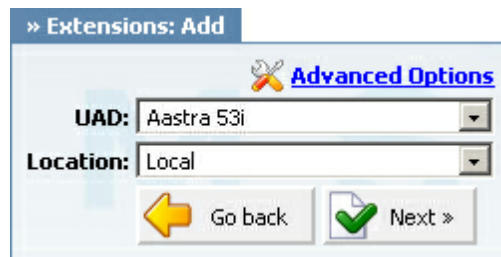
3. Select Aastra 53i from "UAD" select box.

4. Select Location: "Local" or "Remote".

Note:

- "Local" is for all extensions registered on [LAN](#).

- "Remote" is for all extensions registered from remote networks, [WAN](#), Internet etc.



5. Click on "Next".

STEP TWO: Extension values.

1. Enter values into required field text boxes.

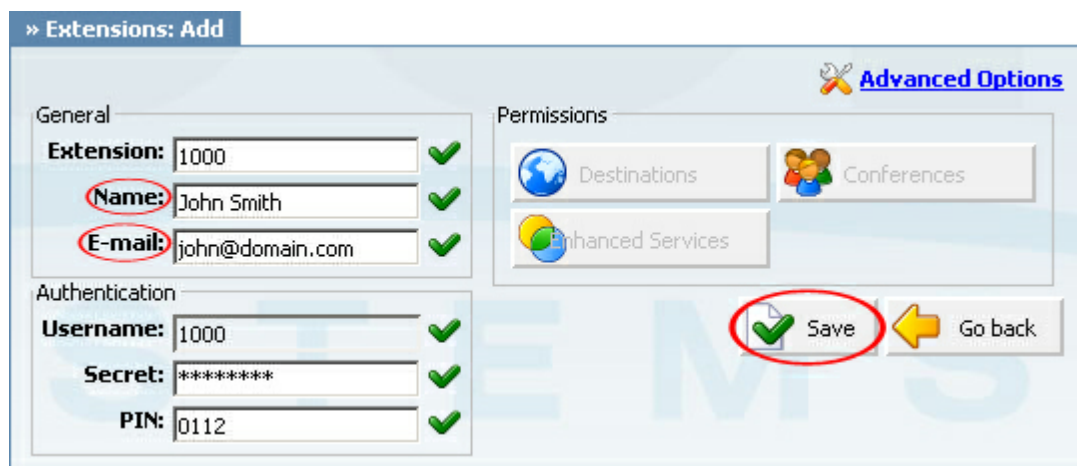
REQUIRED FIELDS:

Name:

Enter a name for the extension being created. **Example:** John Smith.

E-mail:

Enter the e-mail address associated with this extension. This e-mail address will receive all system notification messages. **Example:** john@domain.com.



an example with details filled in

2. Click on "Save".

an example with details filled in

3. Click on "Save & E-mail". Account details will be sent to the e-mail address associated with this extension.

OPTIONAL FIELDS:

Extension:

An auto-generated extension number based on the next available sequential number. An extension value can be changed. **Example:** 1000.

Username:

The username is auto generated/populated and cannot be changed since it allows the system to use this value for other important operations.

Secret:

A secret value associated with the UAD is auto-generated in order to allow the UAD to successfully register with the system. The secret value can be changed.

PIN:

An auto-generated PIN will allow access to voicemail and online self care.

2.2.3 Registering Phone

STEP ONE: Electricity and Ethernet.

- Make sure to properly connect your Aastra 53i to the electricity network using a **power adapter** or **passive power over ethernet injector**.

- Connect the ethernet port to a [hub](#), [router](#) or [switch](#) to access [LAN](#).

Please Note: For information and instruction on how to connect your Aastra 53i to the electricity network and ethernet, check manufacturer documentation on their web site www.aastra.com.

After successfully connecting your Aastra 53i to the electricity and data networks it is time to register it to PBXware.

STEP TWO: Aastra 53i [IP address](#).

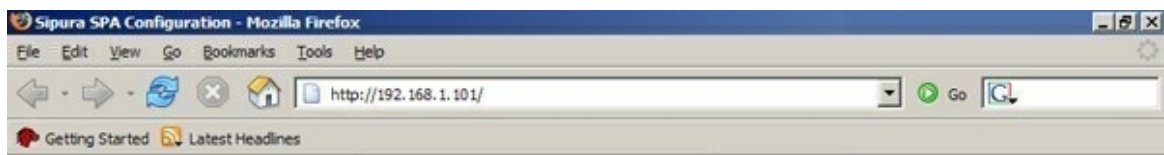
Find out the IP address of the Aastra 53i connected to network.

1. Press the button with the "i" sign.
2. Select "Option list" from the menu.
3. Select "Phone status".
4. Select "IP & MAC addresses" option.
5. The IP address of your PBXware displays in the "IP Address" field.

STEP THREE: Aastra 53i [Web Interface](#).

1. Open a new browser window and enter the IP address in order to access Aastra 53i administration interface.

Example: <http://192.168.1.101/>



an example with IP address

2. Hit "Enter" on your keyboard.
3. Login to the Aastra 53i Web Interface. You'll be prompted to enter a username and password. The factory default username is lower case "admin" and password is "22222".

STEP FOUR: Configuring Aastra 53i.

1. Click on "Line 1" link.

The screenshot shows the Aastra 53i web interface. On the left is a navigation menu with the following items: Status, System Information, Operation (User Password, Softkeys and XML, Directory, Reset), Basic Settings (Preferences, Call Forward), and Advanced Settings (Network, Global SIP, **Line 1**, Line 2, Line 3, Line 4, Line 5, Line 6, Line 7, Line 8, Line 9, Configuration Server, Firmware Update, Troubleshooting). The 'Line 1' item is circled in red. On the right, the 'Network Status' section displays a table with columns 'Attribute', 'Port 0', and 'Port 1'. The data rows are: Link State (Up, Down), Negotiation (Auto, Auto), Speed (100Mbps, 10Mbps), and Duplex (Full, Half). Below this is the MAC Address: 00-08-5D-03-14-E4. The 'Hardware Information' section shows a table with 'Attribute' and 'Value' columns, with one row: Platform (480i Revision 1). The 'Firmware Information' section also shows a table with 'Attribute' and 'Value' columns, with three rows: Firmware Version (1.3.1.1095), Firmware Release Code (SIP), and Boot Version (1.1.0.4). The Date/Time is Feb 2 2006 17:13:46.

Attribute	Port 0	Port 1
Link State	Up	Down
Negotiation	Auto	Auto
Speed	100Mbps	10Mbps
Duplex	Full	Half

MAC Address: 00-08-5D-03-14-E4

Attribute	Value
Platform	480i Revision 1

Attribute	Value
Firmware Version	1.3.1.1095
Firmware Release Code	SIP
Boot Version	1.1.0.4
Date/Time	Feb 2 2006 17:13:46

2. Enter following details into the respective fields.

REQUIRED FIELDS:

Phone Number

PBXware extension number. **Example:** 1000

Authentication Name

Usually the same number as "Phone Number".

Password

The Secret of the extension as received in the e-mail associated with this extension.

Example: 3dX3r5

Proxy Server

IP address of PBXware server. **Example:** 192.168.1.2

Proxy Port

5060

Registrar Server

IP address of PBXware server. **Example:** 192.168.1.2

Registrar Port

5060

Configuration Line 1**Basic SIP Authentication Settings**

Phone Number	1000
Screen Name	
Caller ID	
Authentication Name	1000
Password	****
BLA Number	
Line Mode	Generic

Basic SIP Network Settings

Proxy Server	192.168.1.2
Proxy Port	5060
Outbound Proxy Server	0.0.0.0
Outbound Proxy Port	0
Registrar Server	192.168.1.2
Registrar Port	5060
Registration Period	0

RTP Settings

DTMF Method	RTP
-------------	-----

Save Settings

an example with details filled in

OPTIONAL FIELDS:**Screen Name**

Example: John Smith

Other fields

Other "options" or "fields" should be left blank or as is by default, they do not have importance for registering Aastra 53i to PBXware.

3. Click on "Save Settings".
4. Click on "Reset" link.



5. Click on the "Restart" button to restart your Aastra 53i so the changes take effect.

- Conclusion: If everything is done as above described you should have successfully registered Aastra 53i to PBXware. Dial *123 to verify registration.

- For further information, please contact the manufacturer or check their web site www.aastra.com.

2.3 Auto Provisioning

- [UAD Settings](#)
- [Creating Extension](#)
- [Registering Phone](#)

2.3.1 UAD Settings

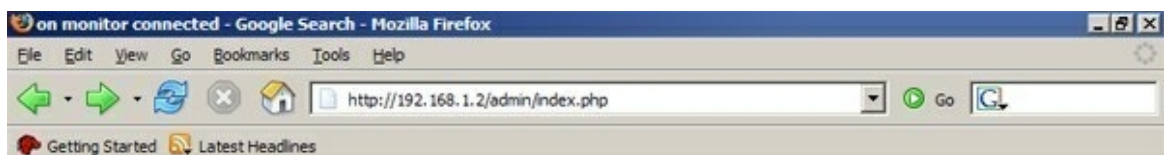
STEP ONE: PBXware [IP address](#).

1. Find out the IP address of the PBXware server.

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1. Open a new browser window and enter the IP address followed by "/admin/index.php" in order to access the PBXware administration interface login screen.

Example: <http://192.168.1.2/admin/index.php>



an example with IP address following by "/admin/index.php"

2. Hit "Enter" on your keyboard.
3. Login to PBXware with your e-mail address and password.



STEP THREE: [UAD](#) status.

1. Make sure the UAD is enabled. To check the UAD status, navigate to "Settings:UAD", and click on the "edit" icon corresponding to "Aastra 53i".

[Add User Agent](#)**SIP****User Agent**

Aastra 480i		
Aastra 9112i		
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Grandstream BT-101		
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Grandstream HT-496		
Polycom IP 301		
Polycom IP 501		
Polycom IP 601		
Snom 320		
Aastra 53i		
Sipura SPA-941		
Sipura SPA 2000		
Sipura SPA 2002		
Sipura SPA 2100		
Sipura SPA 3000		
X-Lite		
X-Pro		
FireFly		

Aastra 53i | EDIT BUTTON

2. Make sure "Status" is set to "active", "Auto provisioning" is set to "Yes", and "[DHCP](#)" is set to "Yes".

» Device > Aastra 53i

Protocol: sip

General

DTMF Mode: rfc2833

Status: active

Network Related

NAT: ☐ Yes ☐ No ☐ Never
☐ Route ☒ N/A

Channels

Incoming Limit: 1

Outgoing Limit: 1

Codecs

Disallow: all

Allow: ☒ G.711 ulaw ☒ G.711 alaw
☐ G.723.1 ☐ G.726
☐ G.729 ☐ GSM
☐ iLBC ☐ Speex
☐ LPC10 ☐ H.261 Video
☐ H.263 Video ☐ H.263+ Video

Auto Provisioning

Auto provisioning: ☒ Yes ☐ No ☐ N/A

DHCP: ☒ Yes ☐ No ☐ N/A

Save Go back

User Agent Auto Provisioning Template:

3. Click on "Save" to save changes.

2.3.2 Creating Extension

STEP ONE: Add Extension.

1. Navigate to "Extensions". Click on "Add Extension".

PBXware Site Settings SM Settings Help Logout

Select a server: 192.168.1.2

Extensions Trunks DIDs Conferences

Add Extension Search

Name	Extension	User Agent	Status	Protocol
« left				

Page 1 of 2 next »

2. The standard options window will be shown below.

» Extensions: Add

Advanced Options

UAD: Please select..

Location: Please select..

Go back Next »

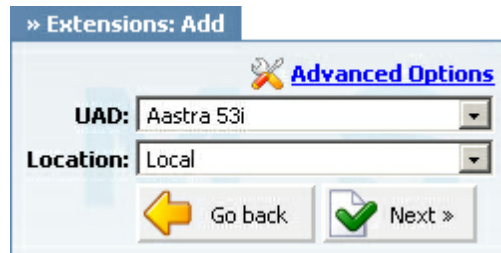
3. Select Aastra 53i from "UAD" select box.

4. Select Location: "Local" or "Remote".

Note:

- "Local" is for all extensions registered on [LAN](#).

- "Remote" is for all extensions registered from remote networks, [WAN](#), Internet etc.



5. Click on "Next".

STEP TWO: Extension values.

1. Enter values into the required field text boxes.

REQUIRED FIELDS:**Name:**

Enter a name for the extension being created. **Example:** John Smith.

E-mail:

Enter the e-mail address associated with this extension. This e-mail address will receive all system notification messages. **Example:** [john@domain.com](#).

Auto provisioning:

Set to "Yes".

MAC Address:

Aastra 53i MAC address. **Example:** 001646f5f797

» Device > Aastra 53i

Protocol: sip

General

DTMF Mode: rfc2833

Status: active

Network Related

NAT: ☐ Yes ☐ No ☐ Never
☐ Route ☒ N/A

Channels

Incoming Limit: 1

Outgoing Limit: 1

Codecs



Disallow: all

Allow: ☒ G.711 ulaw ☒ G.711 alaw
☐ G.723.1 ☐ G.726
☐ G.729 ☐ GSM
☐ iLBC ☐ Speex
☐ LPC10 ☐ H.261 Video
☐ H.263 Video ☐ H.263+ Video

Auto Provisioning

Auto provisioning: ☒ Yes ☐ No ☐ N/A

DHCP: ☒ Yes ☐ No ☐ N/A

 Save  Go back

User Agent Auto Provisioning Template:

an example with details filled in

2. Click on "Save".

» Extensions: Add

General

Extension: 1000 ✓

Name: John Smith ✓

E-mail: john@domain.com ✓




Authentication

Username: 1000 ✓

Secret: ***** ✓

PIN: 8906 ✓




Permissions

 Destinations  Conferences
 Enhanced Services

Auto Provisioning

Auto provisioning: ☒ Yes ☐ No ☐ N/A ✓

MAC Address: 001646f5f797

 Save  Save & E-mail  Go back

an example with details filled in

3. Click on "Save & E-mail". Account details will be sent to the e-mail address associated with this extension.

OPTIONAL FIELDS:

Extension:

An auto-generated extension number based on the next available sequential number. An extension value can be changed. **Example:** 1000.

Username:

The username is auto generated/populated and cannot be changed since it allows the system to use this value for other important operations.

Secret:

A secret value associated with the UAD is auto-generated in order to allow the UAD to successfully register with the system. The secret value can be changed.

PIN:

An auto-generated PIN will allow access to voicemail and online self care.

2.3.3 Registering Phone

STEP ONE: Electricity and Ethernet.

- Make sure to properly connect your Aastra 53i to the electricity network using a **power adapter** or **passive power over ethernet injector**.

- Connect the ethernet port to a [hub](#), [router](#) or [switch](#) to access [LAN](#).

Please Note: For information and instruction on how to connect your Aastra 53i to the electricity network and ethernet, check manufacturer documentation on their web site www.aastra.com.

After successfully connecting your Aastra 53i to the electricity and data networks, it is time to register it to PBXware.

STEP TWO: Aastra 53i [IP address](#).

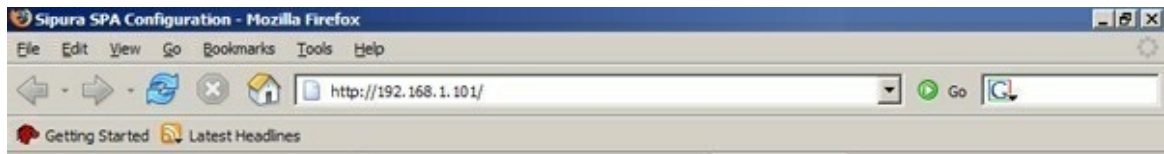
Find out the IP address of the Aastra 53i connected to network.

1. Press the button with the "i" sign.
2. Select "Option list" from the menu.
3. Select "Phone status".
4. Select "IP & MAC addresses" option.
5. The IP address of your PBXware displays in the "IP Address" field.

STEP THREE: Aastra 53i [Web Interface](#).

1. Open a new browser window and enter the IP address in order to access Aastra 53i administration interface.

Example: <http://192.168.1.101/>



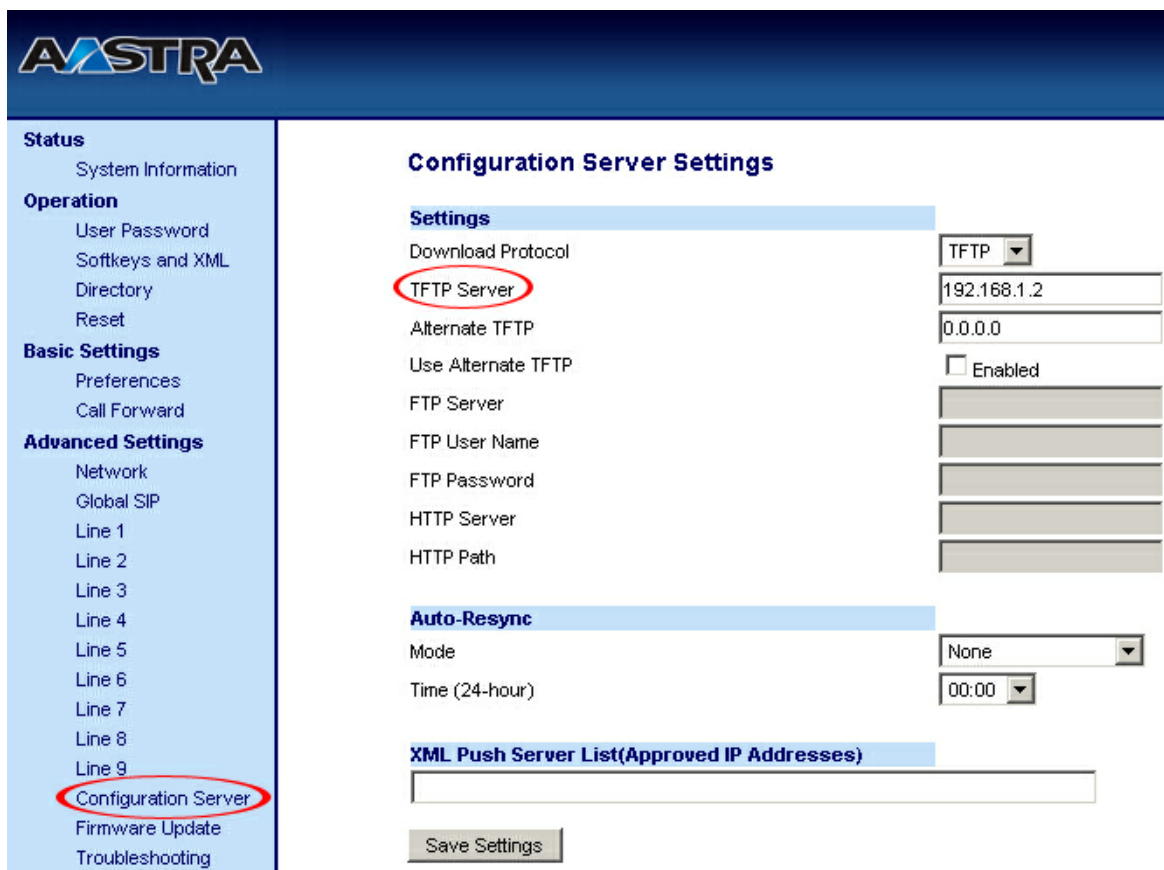
an example with IP address

2. Hit "Enter" on your keyboard.

3. Login to the Aastra 53i Web Interface. You'll be prompted to enter a username and password. The factory default username is lower case "admin" and password is "22222".

STEP FOUR: Configuring TFTP server.

1. Click on "Configuration Server" link.

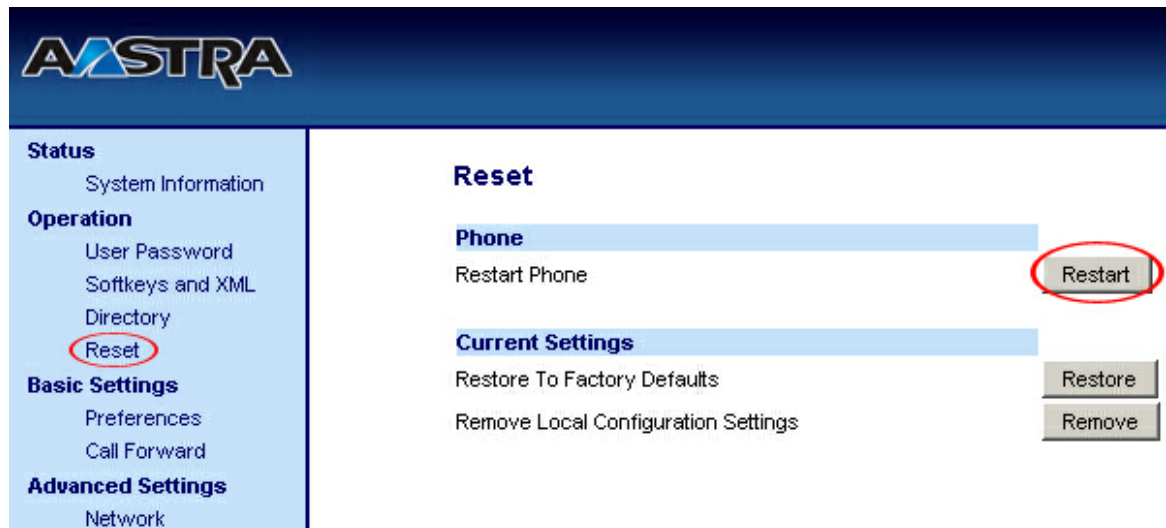


an example with details filled in

2. "TFTP Server" must be set with TFTP server value. **Example:** 192.168.1.2

3. Click on "Save Settings".

4. Click on "Reset" link.



5. Click on the "Restart" button to restart your Aastra 53i so the changes take effect.

2.4 Auto Configuration

- [Requirements](#)
- [Auto Configuration](#)

2.4.1 Requirements

1. Make sure your devices are properly connected to the same [LAN](#) as your PBXware.
2. Ensure that all devices are set to factory defaults.
3. Ensure that all devices are using port 5060.

2.4.2 Auto Configuration

1. Navigate to "Extensions: Find Phones".

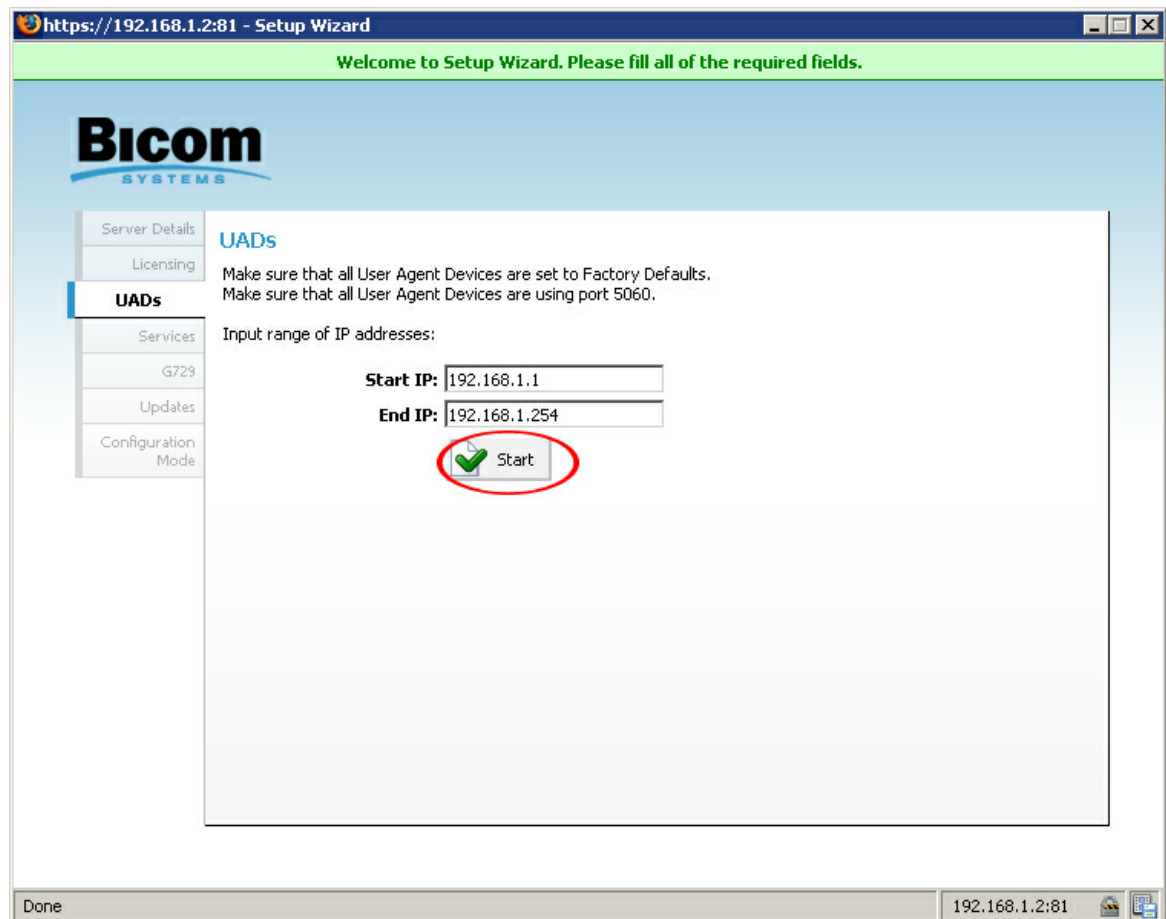


2. A pop up window will appear. Input range of IP addresses

Example:

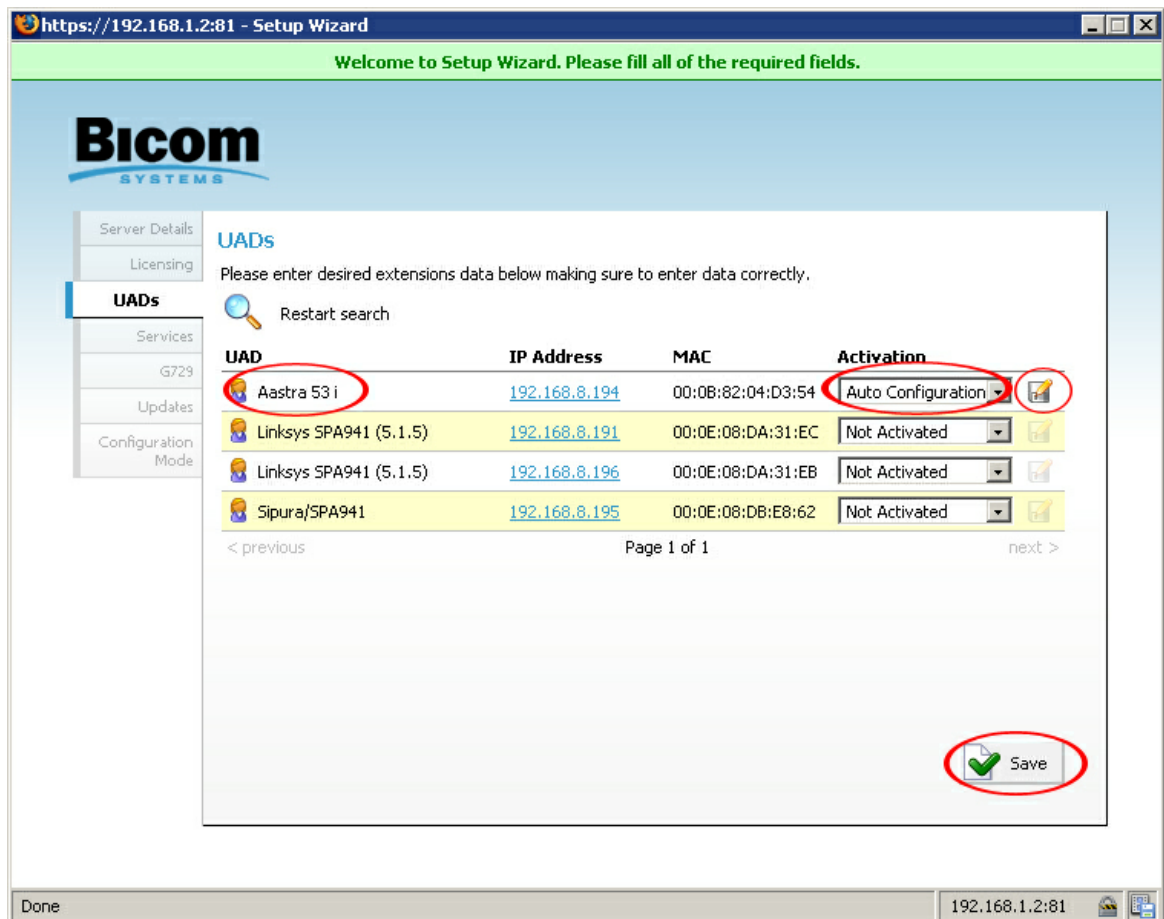
- Start IP: 192.168.1.2
- End IP: 192.168.1.254

3. Click on "Start". PBXware will search for devices connected to the same [LAN](#) in the selected range of IP addresses.



an example with range of IP addresses

4. After the PBXware has finished searching for devices, a list of all devices found will be shown.
5. Change the activation status from "Not Activated" to "Auto Configuration" for one or more displayed devices of your choice.
6. Click on the "edit" button next to the activation select box to enter properties for the selected device.



an example with list of found devices

7. After you have edited a device, a pop up window will appear.

#	Use	Name	E-mail	Ext	PIN	Secret
1	New	John Smith	john@domain.com	1000	1223	*****
2	New	John Smith	john@domain.com	1001	1224	*****
3	New	John Smith	john@domain.com	1002	1225	*****
4	New	John Smith	john@domain.com	1003	1226	*****

Save

Done 192.168.1.2:81

an example with 4 configured lines

8. The Aastra 53i has 4 lines available, you can configure just one or all of them as shown above.

Line 1 example

Name: John Smith
 E-mail: john@domain.com
 Ext: 1000
 PIN: 1223

Secret: Enter at least 6 digits or letter long secret.

9. Click on "Save", entered values will be saved and the pop up window will disappear.

10. Click on the "Save" button shown below to finalize the "Auto Configuration".

https://192.168.1.2:81 - Setup Wizard

Welcome to Setup Wizard. Please fill all of the required fields.

Bicom
SYSTEMS

Server Details
Licensing
UADs
Services
G729
Updates
Configuration Mode

UADs

Please enter desired extensions data below making sure to enter data correctly.

Restart search

UAD	IP Address	MAC	Activation
Aastra 53 i	192.168.8.194	00:0B:82:04:D3:54	Auto Configuration
Linksys SPA941 (5.1.5)	192.168.8.191	00:0E:08:DA:31:EC	Not Activated
Linksys SPA941 (5.1.5)	192.168.8.196	00:0E:08:DA:31:EB	Not Activated
Sipura/SPA941	192.168.8.195	00:0E:08:DB:E8:62	Not Activated

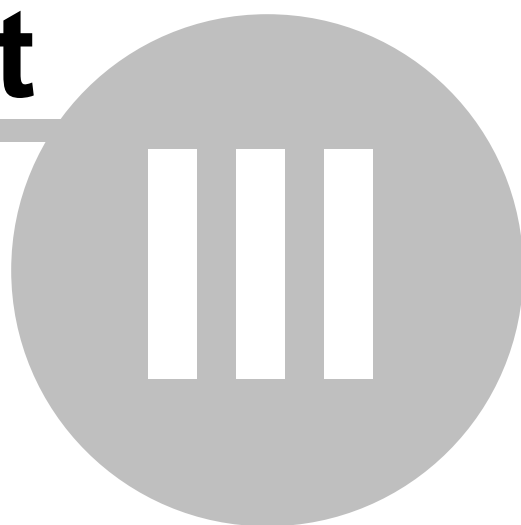
< previous Page 1 of 1 next >

Save

Done 192.168.1.2:81

11. Your device(s) will automatically reboot and be auto configured.

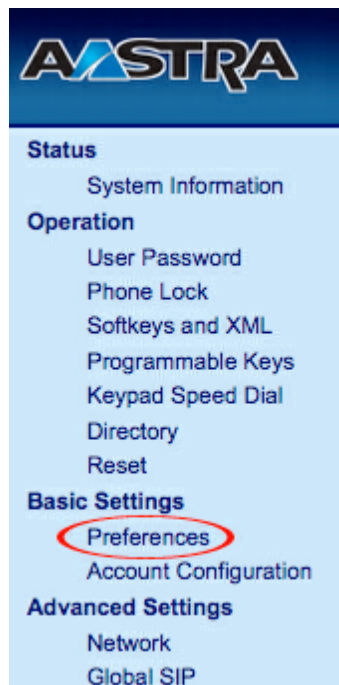
Part



3

Paging

1. Navigate your Internet browser to the phone's IP address (for example <http://192.168.1.1>).
2. Select "Preferences" under the "Basic Settings" tab.



3. Make sure that

Auto-Answer box is checked.
Microphone Mute box is not checked.



4. Navigate to the bottom of the page and click on "Save Settings".

Save Settings

5. Reboot the phone to apply the new settings.

NOTE: At the time, the paging option is set for all lines and works once the handset is picked up. Paging tested with Firmware version 1.3.1.1095.

Part

IV

4

Glossary

- **DHCP** = Dynamic Host Configuration Protocol (DHCP) is a communications protocol that allows network administrators to manage and automate the assignment of Internet.
- **HUB** = A common connection point for devices in a network.
- **IP Address** = Internet Protocol address.
- **Local** = A local area network (LAN) is a computer network covering a local area, like a home, office, or small group of buildings such as a college.
- **LAN** = Local Area Network.
- **PIN** = Personal Identification Number.
- **Remote** = Network devices that are managed or controlled from a network system other than the system to which they are directly connected.
- **Router** = A device that forwards data packets from one local area network (LAN) or wide area network (WAN) to another.
- **Switch** = Network device that selects a path or circuit for sending a unit of data to its next destination.
- **UAD** = User Agent Device.
- **VoiceMail** = The electronic transmission of voice messages over the Internet. The messages are stored on a computer until the recipient accesses and listens to them.
- **WAN** = Wide Area Network.
- **Web Interface** = A web interface is the system of controls with which the user controls a device.

...

